

REMARKS

This is in full and timely response to the above-identified Office Action. The above listing of the claims supersedes any previous listing. Favorable reexamination and reconsideration are respectfully requested in view of the preceding amendments and the following remarks.

Claims 1-43 have been cancelled and replaced with a new set 44 - 55. The cancellation of claims 1-43 summarily moots the rejections under §§§ 101, 112 and 102. Nevertheless, the Applicants call attention to the fact that the newly presented claims have been amended to recite an "isolated oxidoreductase" and that complementary has been amended to "fully complementary." Inasmuch as the newly presented claims are based on those originally filed, no new matter is introduced.

In connection with the objection that the limitation "(hybridization) under stringent conditions is indefinite, Applicants submit that in connection with this aspect of the invention, the specification refers to "sambrook and Russsell, Molecular Cloning, A laboratory Manual" - see page 4, paragraph 3 of the 'as filed' specification in which the specific conditions for stringency are defined. Moreover, the term "hybridization under stringent conditions" is well known in the art, and therefore the scope of the claims can readily determined by one of skill in the art to which the invention pertains.

Attention is called to MPEP 2164.01 wherein it is stated that:

A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). (Emphasis added)

As to the written description and enablement issues, Applicant asserts that in the field of technology to which the invention pertains it is commonly known that DNA sequences need not have identify or high homology in order to exhibit the same functions or to hybridize, and that amino acid sequences which differ in their sequence by more than 30% can nevertheless show the same activity.

To determine functionally equivalent sequences within the limitation of the present invention is routine work for one of skill in the art and does not require undue experimentation, particularly given the availability of appropriate automated tools, for example to identify conserved regions.

Applicants again call attention to MPEP 2164.01 - Test of Enablement - wherein it is stated that:

Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained **sufficient information** regarding the subject matter of the claims as to enable **one skilled in the pertinent art** to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916) which postured the question: **is the experimentation needed to practice the invention undue or unreasonable?** That standard is still the one to be applied. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Accordingly, even though the statute does not use the term "undue experimentation," it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. *In re Wands*, 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). See also *United States v. Telecommunications, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) ("The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent **coupled with information known in the art** without undue experimentation."). **A patent need not teach, and preferably omits, what is well known in the art.** *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and *Lindemann Maschinensfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). **>Any part of the specification can support an enabling disclosure**, even a background section that discusses, or

even disparages, the subject matter disclosed therein. *Callicrate v. Wadsworth Mfg., Inc.*, 427 F.3d 1361, 77 USPQ2d 1041 (Fed. Cir. 2005)(discussion of problems with a prior art feature does not mean that one of ordinary skill in the art would not know how to make and use this feature).< Determining enablement is a question of law based on underlying factual findings. *In re Vaeck*, 947 F.2d 488, 495, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991); *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 750 F.2d 1569, 1576, 224 USPQ 409, 413 (Fed. Cir. 1984). (Emphasis added)

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,
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